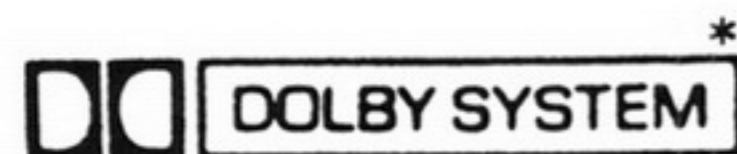


# Service Manual

Stereo Radio Cassette Player

Mini Cassette

## RQ-V500



Color

(K)... Black Type

Area

Country Code	Area	Color
(P)	U.S.A.	(K)
(PC)	Canada.	

\* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

### AR90 MECHANISM SERIES

#### ■ SPECIFICATIONS

##### General:

Power Requirement: Battery; 3V (two R6/LR6, "AA" size batteries)  
AC; with optional Panasonic AC adaptor RP-AC33

Power Output: 15mW + 15mW...RMS (max.)

Input: DC IN; 3V (mini type)

Output: Headphones; 20Ω, φ3.5

Dimensions: 4 7/16" × 3 7/16" × 1 1/16"

(W × H × D) (113 × 87.7 × 26.6mm)

Weight: 6.7 oz (190g) without batteries

##### Radio Section:

Radio Frequency Range: FM; 87.5~108MHz  
AM; 520~1710kHz

Intermediate Frequency: FM; 10.7MHz  
AM; 450kHz

Sensitivity: FM; 3.5μV/ -3dB Limit sense  
AM; 316μV/m/0.1mW output

##### Tape Deck Section:

Frequency Response: Normal; 30~18,000Hz  
CrO<sub>2</sub>; 30~18,000Hz  
Metal; 30~18,000Hz

Motor: Electrical governor motor

Track System: 4-track 2-channel stereo playback

Tape Speed: 1-7/8ips (4.8cm/s)

Design and specifications are subject to change without notice.

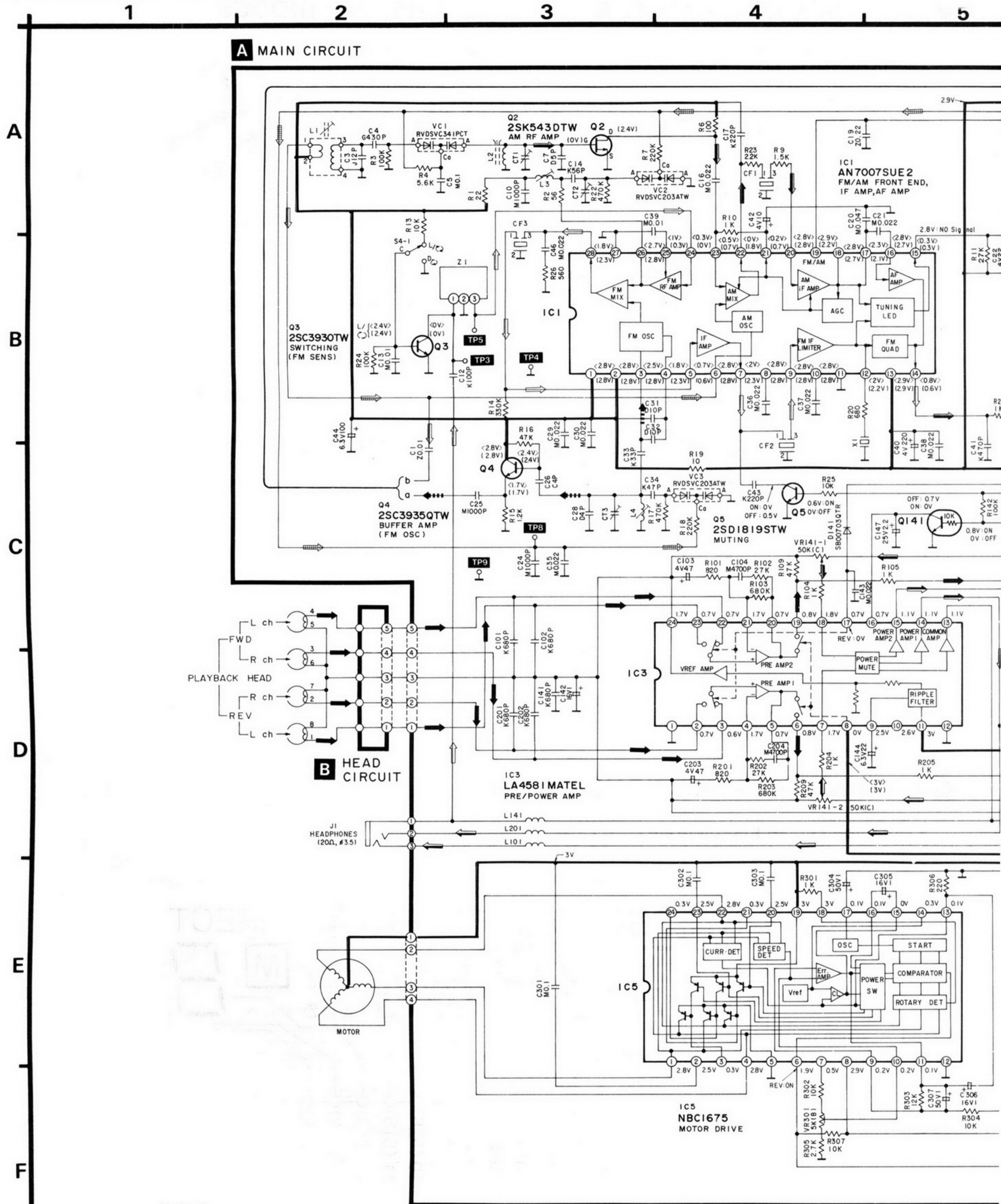
# Panasonic®

Matsushita Services Company  
Division of Matsushita Electric  
Corporation of America  
50 Meadowland Parkway,  
Secaucus, New Jersey 07094

Panasonic Sales Company,  
Division of Matsushita Electric  
of Puerto Rico, Inc.  
San Gabriel Industrial Park  
65th Infantry Ave. Km.9.5  
Carolina, P.R. 00630

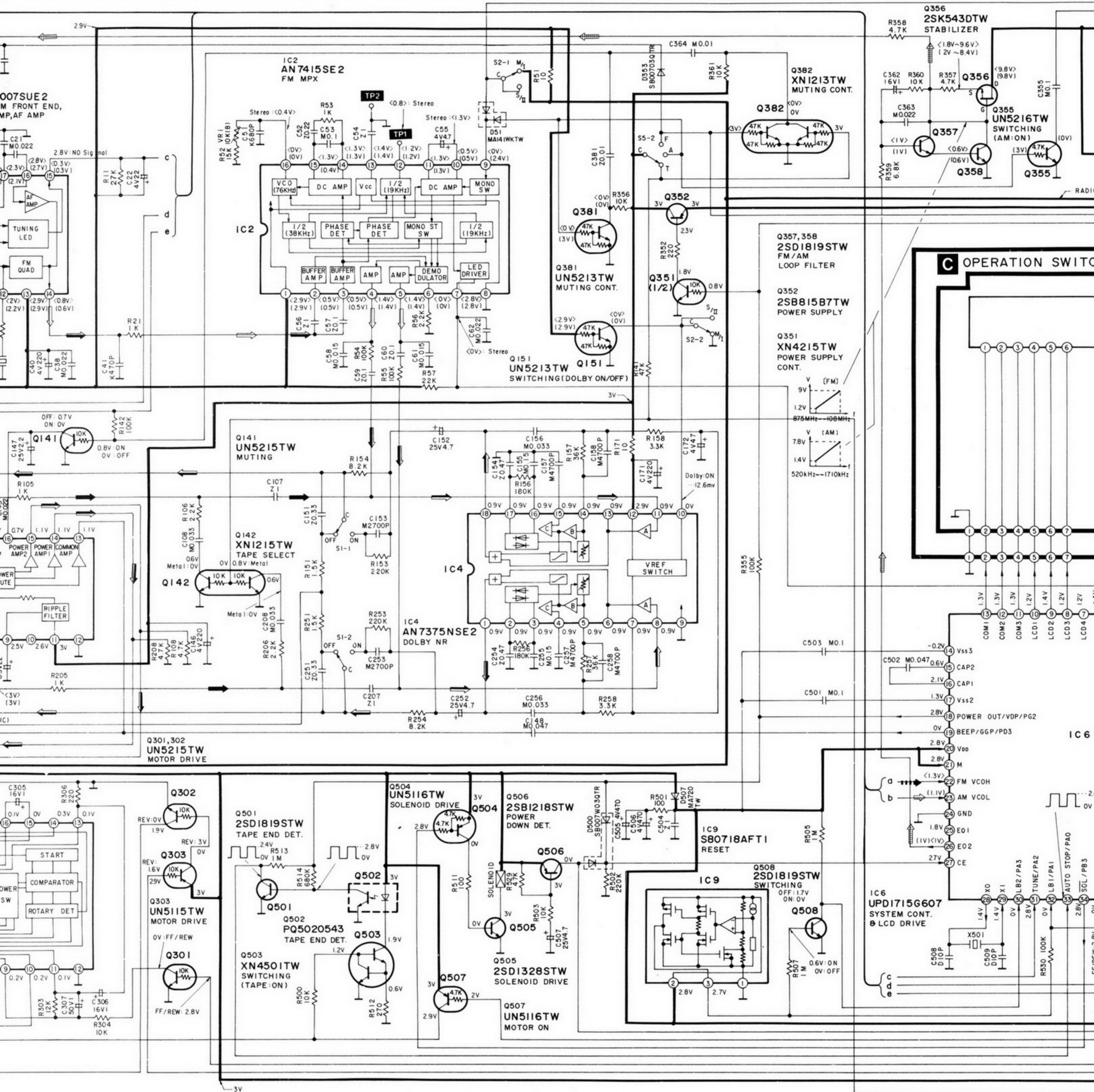
Matsushita Electric  
of Canada Limited  
5770 Ambler Drive, Mississauga,  
Ontario, L4W 2T3

# SCHEMATIC DIAGRAM



**Notes)**

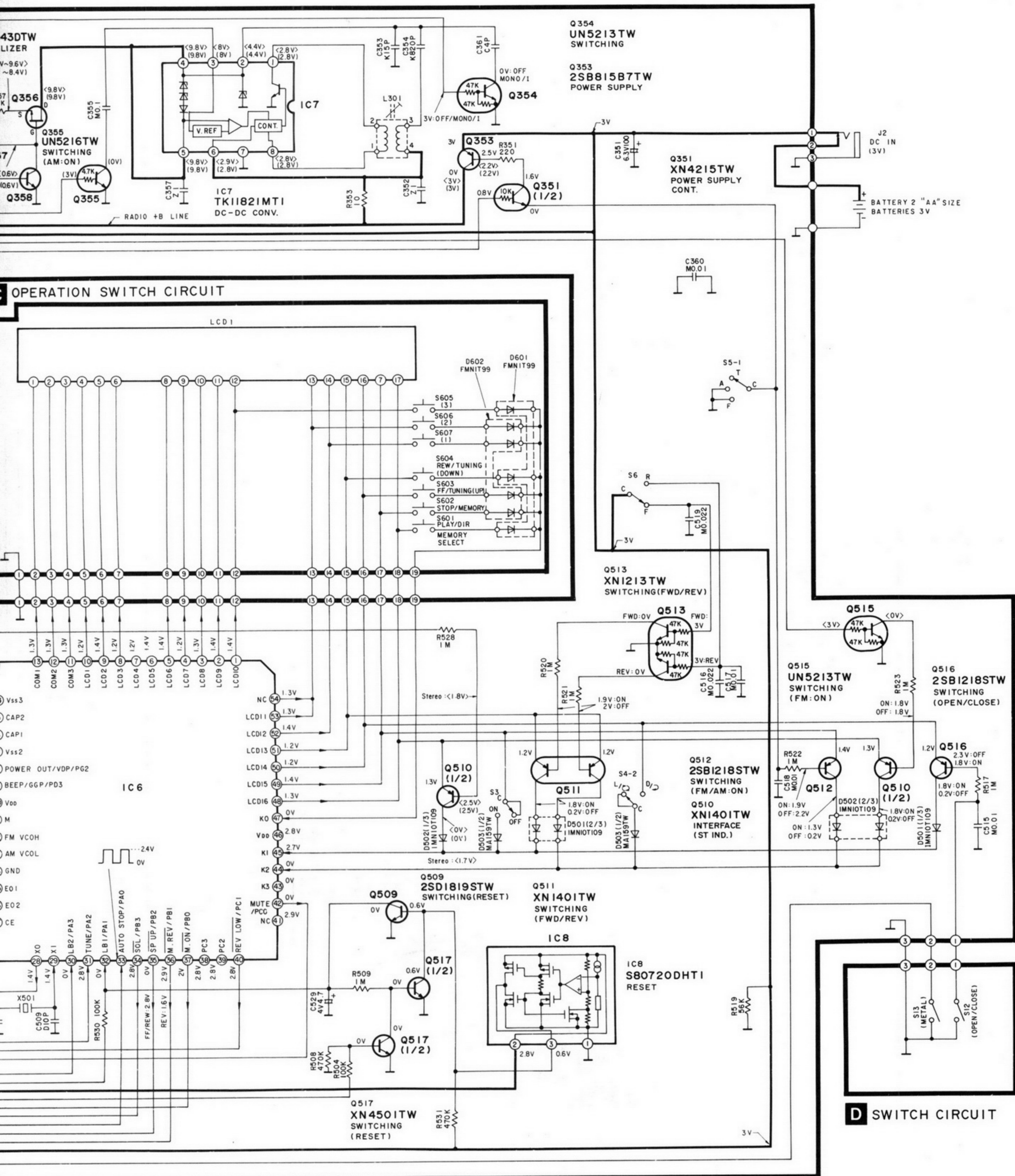
- S1: XBS switch in "OFF" position.
- S2: Dolby NR/FM mode switch in "M/I" position. (S/II...ON/ST/II, M/I...OFF/MONO/I)
- S3: Hold switch in "OFF" position.
- S4: FM sens (sensitivity)/REV mode switch in "L/↻" position. (L/↻...LOCAL/↻, D/↻...DX/↻)
- S5: Selector switch in "TAPE" position. (F...FM, A...AM, T...TAPE)
- S6: FWD/REV. switch in "FWD" position. (F...FWD, R...REV)
- S12: Leaf switch (open/close).
- S13: Leaf switch (Metal) in "OFF" position.



“TAPE” position.  
 ...TAPE)  
 in “FWD” position.  
 /close).  
 d) in “OFF” position.

- S601: Play/direction/M. select switch in “OFF” position.
- S602: Stop/memory switch in “OFF” position.
- S603: FF/UP switch in “OFF” position.
- S604: Rewind/down switch in “OFF” position.
- S605~607: Direct memory switches.  
 [S605 : 3, S606 : 2, S607 : 1]

- VR1: FM MPX adjustment VR.
  - VR141: Volume control VR.
  - VR301: Tape speed adjustment VR.
  - DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.
- < >...FM, ( )...AM, No mark...Playback



VR.  
ent VR.  
ken with electronics  
of battery.  
rk...Playback

- Battery current:  
No signal: (AM)...47.2mA (VR: MAX)  
(FM)...59.2mA (VR: MAX)
- Tape playback: 140mA (VR: MAX)
- 74dB/m • 30% MOD 54mA (VR max)
- 60dB • 30% MOD 71mA (VR max)

• This schematic diagram may be modified at any time with the development of new technology.

- ▶ : FM/AM Vcap CONTROL SIGNAL
- ▶ : AM SIGNAL
- ▶ : PLAYBACK SIGNAL
- ▶ : MAIN (TAPE/RADIO) SIGNAL
- ⊕ : B LINE

**D** SWITCH CIRCUIT